UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
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ENFORCEMENT &
COMPLIANCE
ASSURANCE DIVISION

Inspection Date(s): July 18, 2019
Regulatory Program(s): SIP, PSD, TV Permit, NSPS, NESHAP
Company name: ConocoPhillips Alaska, Inc.
Facility Name: CPF#1
Facility Physical Location: Kuparuk River Field, Alaska
Latitude 70.323720°/Longitude -149.611196°
Mailing Address: 700 G Street
P.O. Box 100360
Anchorage, AK 99510-0360
County/Parish: North Slope Borough
Facility Contact: Brad Broker/Catie Coursen, Environmental Coordinator
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ICIS-Air Number: AK0000000218500017
Permit Number: AQ0267TVP01
NAICS: 211111 - Crude Petroleum and Natural Gas Extraction.
SIC: 1311 - Crude Petroleum and Natural Gas
Attendees:
Facility Representatives:

Laura Perry, Air Quality Coordinator (907) 265-6937
Peter Davenport, NSK HSE Director (907) 659-7590
Garey Wagner, CPF-1 Ops Supervisor (907) 659-7061
Catie Coursen, Environmental Coordinator (907) 659-7242
Casey Ayers, CPF-1 Maintenance Supervisor (907) 659-7750
Chris Mottet, CPAI *Alternate* Maintenance Supervisor, (907) 659-7750[1]
Scott Fahrney, Operations Superintendent (907) 659-7727
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Kelly Tautfest, DSM, AES (907) 659-7511
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EPA Inspectors:

John Pavitt, EPA, Region 10, AOO, (907) 271-3688
Christopher Williams, EPA, OECA, AED, (202) 564-7889

State Inspector(s):

Breanna Howard, AK DEC, Fairbanks Office, (907) 451-3189

[1] Facility representatives on an alternate schedule swapped out in the p.m. See Attachment 3, sign-in sheets.

EPA Lead Inspector Signature/Date	John Pavitt	9/12/19
	John Pavitt, R10, ECAD, ATES	**Date**
EPA Inspector Peer Review Signature/Date	Christopher Williams	9/12/19
	Christopher Williams, OECA, AED	**Date**
Supervisor Signature/Date	Katie McClintock	9/12/19
	Katie McClintock, R10, ECAD, ATES Section Chief	**Date**

I. Introduction

The United States Environmental Protection Agency (EPA) and Alaska Department of Environmental Conservation (ADEC) inspected ConocoPhillips Alaska, Inc. (CPAI), Central Production Facility #1 (CPF#1) (or the "facility") to verify compliance with applicable State and federal regulations under the Clean Air Act (CAA). On July 2, 2019, the EPA notified the facility by phone and email of the CAA inspection to be conducted on July 18, 2019. This email is attached to this report (Attachment 1). The inspection was focused on compliance with New Source Performance Standards (NSPS) Subpart OOOOa – Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015. CPF#1 is an existing facility which became subject to the rule when it was modified or reconstructed after September 18, 2015.

A. Summary of the Facility

CPAI, CPF#1 is an oil and gas production facility in the Kuparuk River Unit, on the North Slope of Alaska. The SIC code for this facility is 1311, Crude Petroleum and Natural Gas Production. The NAICS code of this facility is 211111, Crude Petroleum and Natural Gas Extraction. CPF#1 has a processing pad which processes crude oil production fluids received from Well Pads.

Production fluids from wells are processed to remove hydrocarbon gas and water from crude oil. Hydrocarbon gas is dehydrated and compressed for reinjection into the reservoir or used as fuel. Water is processed to remove oil before injection into disposal or injector wells. Crude oil is sent from the CPF#1 production pad via pipeline to the Trans Alaska Pipeline which then ships all oil from the Kuparuk field and other fields to Valdez, Alaska. According to the Title V permit Statement of Basis, the facility is a major source for five criteria pollutants: nitrogen oxides (NOx), carbon monoxide (CO), particulate matter (PM-10), sulfur dioxide (SO2) and volatile

organic compounds (VOC). The facility is minor for hazardous air pollutants (HAPs). The highest individual HAP is hydrogen chloride (HCl), with an emission rate of 6 TPY.[2]

The facility's Title V air permit was issued on April 20, 2003 and was scheduled to expire May 27, 2008. The permit has been revised twice by ADEC and the facility operates under an application shield. NSPS Subpart OOOOa was promulgated after the permit was issued and the permit does not identify Subpart OOOOa as an applicable requirement. In May, 2019 ConocoPhillips applied to the State for a permit modification to disaggregate Well Pad emission sources from the Title V permit. To date, the State has not approved the facility's disaggregation request.

The wells at CPF#1 Well Pads are not identified as emission sources in the Title V permit, however, the permit does list certain types of emission sources at two of the Well Pads. These are: Drilling Rigs, Well Servicing Equipment and Well Frac Units at Drill Sites 1E and 1J. (Attachment 2, Permit Emission Unit Inventory). Meanwhile, CPAI has reported to EPA Region 10 that it has Well Affected Facilities and Fugitive Emissions Components at Well Sites which are subject to federal air rules at CPF#1 Well Pads: 1A, 1B, 1C, 1D, 1E, 1G, 1H, 1L and 1Q. (See NSPS Subpart OOOOa Annual Reports section, below.)

B. Compliance History

A review of EPA's database, Enforcement and Compliance History Online (ECHO)[3] shows that in the five years prior to the inspection, the facility submitted an Annual Compliance Certifications (ACC) yearly as required by the Title V permit (Condition No. 89) and the CAA, and that ADEC conducted on-site inspections of the facility three times (every two years). The State issued two Warning Letters to the CPF#1 facility, dated 6/30/17 and 5/9/18 which identified opacity violations from emergency flares located at the CPF#1 production pad, unrelated to Well Pad operations. The flare incidents occurred during planned shutdown activities. The earlier Warning Letter also identified opacity violations from a waste incinerator.

The most recent ACC report submitted by the facility to EPA R10 and ADEC (for calendar year 2018), does not address NSPS Subpart OOOOa. Permit AQ0267TVP01 does not identify Subpart OOOOa as an applicable requirement and does not include permit terms or conditions to demonstrate compliance with the Subpart. The ACC report states the facility was in "intermittent compliance" with the following Title V permit conditions:

- **3b.** Visible Emissions (VE) 20% opacity limit. EU 30 (Flare).
- **24, 33.3.** Not giving the State a copy of an NSPS Subpart J EEMSP report submitted to EPA.

[2] Title V Permit, Statement of Basis, Table A. See also Permit Conditions 43 and 44, Owner Requested Limits to avoid source classification as HAPs major.
[3] See https://echo.epa.gov/, a publicly available database.

- **34.11.** Not giving the State a copy of an NSPS Subpart GGG/VV report submitted to EPA.
- **42.3.** Not including in a Facility Operating Report (FOR) the VOC emission estimate from EU 56 (Temporary Crude Oil Storage Tanks)
- **87.1, 88.1.** Not giving the State copies of NSPS reports submitted to EPA.

Note that the 2018 ACC report does report on compliance with NSPS Subpart OOOOa for another CPAI facility located at the Alpine Field (but not for any facilities in the Kuparuk Field, including CPF#1).

C. NSPS Subpart OOOOa Annual Reports

CPAI submitted NSPS Subpart OOOOa Annual Reports to EPA as required by 40 CFR §60.5420a(b), with a cc to ADEC. The reports are comprehensive; they include information on all three Central Processing Facilities (CPF# 1, 2 and 3) in the Kuparuk River Unit.

- The *Initial Report*, dated 6/27/17, starts with the initial compliance period, and covers the period 9/18/15 through 3/31/17. (See Initial Compliance Report requirements, §60.5410a.) The report had the following information:
  - It describes monitoring activities at well affected facilities, only.
  - Describes hydraulic fracturing/refracturing at 12 well sites (none at CPF#1).
  - At well affected facilities, the report states that, "Once fluids reached the surface, production was immediately started." Therefore, the duration of flowback reported was "N/A."

- The *2018 Annual Report*, dated 6/28/18, covers the time period 3/31/17 through 3/31/18. (See Reporting Requirements, §60.5420a(b).)
  - It describes monitoring activities at well affected facilities plus inspections/repairs of fugitive emission leaks at well sites.
  - Describes hydraulic fracturing/refracturing at six well sites (one at CPF#1).
  - Describes emissions monitoring for fugitive leaks at 29 well sites in the Kuparuk River Unit, eight of which (28%) send fluids to the CPF#1 facility.
  - Counted 71 leaking components at CPF#1 well sites out of 320 leaking components overall in the Kuparuk River Unit field (CPF#1 had 22% of leaking components overall).
  - Placed 9 leaking components at CPF#1 well sites on a delay-of-repair schedule. This represents 19% of the 47 total leaking components on delay-of-repair in the Kuparuk River Unit. The report stated repairs were delayed because they would require equipment shutdowns.
  - Stated that approximately 1,100 Unsafe-to-Monitor Components were surveyed in the Kuparuk River Unit in the reporting period. These were locations which had been identified as Unsafe-to-Monitor previously, then monitored later.

- Identified deviations from the facility's monitoring plan at multiple sites in the Kuparuk River Unit:

  - Lacking a digital photo on the day of the survey or resurvey.
  - Resurvey documentation was lacking a date on digital photos.
  - Resurvey documentation was lacking GPS coordinates.
  - Initial repair not performed w/in 30 days of initial survey.
  - A leak tag was removed before resurvey.

II. On Site Inspection

Opening Conference

I arrived at the CPF#1 facility with ADEC inspector Breanna Howard and EPA inspector Christopher Williams at 8:45 am on July 18, 2019 for an announced inspection. We met with 10 company representatives at the Opening Conference. The other inspectors and I presented our credentials to facility representative Catie Coursen and the other company representatives. I informed them that this was a joint State/EPA inspection with EPA lead to determine compliance with regulations under the Clean Air Act. The company representatives also introduced themselves and I passed around a sign-in sheet (Attachment 3).

I said the scope of the inspection was to check on compliance with New Source Performance Standards (NSPS) Subpart OOOOa. I said even though that was the focus, we would keep our eyes open and make note of any other potential air compliance issues we might come across as we carried out today's inspection. I said our inspection would involve going to one or more well pads to check for methane and VOC leaks, using an FLIR infrared camera and a photoionization detector (PID).

I said I had reviewed information in their file in advance of the inspection and had several comments and questions. I said their Initial Subpart OOOOa Annual Report (June 2017) gave well flowback information, only. Reading from the report I said that it stated, "Once fluids reach the surface, production was immediately started." I asked if flowback fluids are sent to a storage tank in any circumstances. Facility representative Laura Perry said that fluids and gases go to a production center. She said portable separation tanks are brought in by PTS company, a service contractor. She said they use a portable separator during flowback activities.

I asked about Unsafe-to-Monitor designations in their annual reports. I said that I counted about 1,100 Unsafe-to-Monitor components that were monitored in the Initial Report. I asked what accounts for that? Ms. Coursen said those are weather related, such as snow pack and cold weather. I said I noticed that the next annual report (June 2018) had many fewer Unsafe-to-Monitor designations and asked what accounted for the change. Ms. Coursen said that's because subpart OOOOa changed, and only requires monitoring once a year, which they can do when the weather is better. She said their monitoring is performed by Kakivik Co.

I said the June 2018 Annual Report identified deviations from their monitoring program at 19 well sites. I asked if that had improved in the new year. The facility representatives said that was reduced to just 11 sites in the 2019 report. I asked why the deviations happened and why were they improving. The facility representatives said one cause was that previously, technicians were not dedicated just to the task leak monitoring; they were doing a lot of other types of work and were missing details in their documentation required by the rule.

I asked if they tag the leaking components they find. The facility representatives said tags are applied if a leak is not repaired immediately. It's a pink tag with yellow ribbon, with details written on it, they said. I asked if they photograph the leak sites they monitor. They said they photograph just the drill site entrance sign. They said Well Pad 1-Q currently has 2 tagged, leaking components on Delay-of-Repair. A delay is needed, they said, because repairs require a shutdown. I said we'd like to visit Pad 1-Q today for this inspection.

I said I reviewed the facility's Annual Compliance Certifications (ACC) - required by the Title V permit – and it has no information about Subpart OOOOa compliance. But I noticed the ACC reports for their Alpine facility does address it. I recommended that they start including Subpart OOOOa compliance information for CPF#1 in these reports.

I said the facility submitted two Permit Deviation Reports (PDR) to the State that I'd like to understand better.

- A PDR submitted on 3/12/19 states the facility had not included required information with the 3rd Quarter 2018 Facility Operating Report (FOR). (Attachment 4) The missing information is required by Permit Condition 42.3 and is regarding flowback simulation model inputs, outputs, calculations and assumptions used in EU ID 56 VOC estimates. EU ID 56, Temporary Crude Oil Storage Tank(s), is located at Drill Sites 1E and 1J. The facility then submitted the omitted information, showing that VOC emissions from the tank(s) were 6.3 tons in the 3rd Quarter. I said that I had noticed that calculated VOC emissions from flowback ranged as low as zero and as high as 10 tons/year in different FOR's over time. I asked why. The facility representatives said that's because of their intermittent use.

- Another PDR submitted on 6/11/19 states the facility exceeded the annual (12 month rolling) fuel use limit at Drill Sites 1E and 1J for EU 61, Well Servicing heaters. Permit Condition 16 limits fuel use for EU 61 to 200,000 gallons/12-month period. (Attachment 5) The facility representatives said they applied to the State to revise their permit and remove this limit. To date, the State has not approved this request.

III. Process Overview

The facility provided a general description of their Emissions Monitoring Plan and gave us a printed copy of their plan. (Attachment 6) The monitoring plan covers multiple CPAI facilities subject to NSPS Subpart OOOOa Leak Detection and Repair (LDAR) requirements located in the Kuparuk River Unit (KRU) and the Colville River Unit Oilfield (ALP) drill sites. The facility uses an Optical Gas Imaging (OGI) infrared camera to look for leaking equipment. After repairs are made, the facility uses any of three methods to verify the repairs were successful: OGI, Method 21 Instrument (FID or PID), or Method 21 Alternative Screening (soap bubbles).

The monitoring plan states that "Portable equipment not owned and operated by CPAI, such as contractor flowback equipment, will not be included in leak surveys."

The facility representatives said we would be escorted during our inspection at the well pads. One of our escorts will have an H2S monitor for safety, they said. H2S concentrations in gas are about 100 ppm, they said.[4] Other safety concerns they identified were slips/trip/falls.

We talked about which well pads to select for the inspection. We selected Pad 1-Q because it has 2 leaking components on Delay-of-Repair, and Pad 1-E because it's a very large pad, receives "a lot of West Sack Field fluids" according to the facility representatives and has emission sources subject to permit restrictions.

Mr. Williams asked what the API gravity of the crude oil is at CPF#1. The facility representatives said it's 26 or 27. We left the CPF#1 conference room at about 10:00 am to go to Pad 1-Q. (See Map of Well Pads and CPF#1, Attachment 7)

IV. Plant Tour/Walkthrough

The EPA and ADEC inspectors visited two well pads during the inspection (1-Q and 1E), accompanied by facility representatives Laura Perry, Amanda Dotten, Catie Coursen, Charles (Chuck) Kindstrand, and Kelly Tautfest.

Each site visited has been identified by CPAI as being subject to NSPS Subpart OOOOa in Annual Reports submitted to EPA R10. Each is a Collection of Fugitive Emissions Components at a Well Site. (§60.5365a(i))

At each site visited, the inspectors obtained photographs of the pad and facility equipment (see the photolog in Attachment 8). The inspectors made auditory, visual, and olfactory (AVO) observations, including OGI (see the video log in Attachment 9), as well as photo-ionization detection (PID) observations to document the conditions of and any emissions originating from the well sites.

During the facility inspection, I wrote down observations in a notebook and took photographs, as other Inspection Team members used instruments to check for leaks. Inspection Team members used the following equipment:

[4] The IDLH for H2S is 100 ppm, according to NIOSH. See: https://www.cdc.gov/niosh/idlh/7783064.html

– EPA Inspector Williams operated an optical gas imaging infrared (OGI) camera manufactured by FLIR, Model GF320, serial number 44401085 (EPA Tag ID: C10103) to record videos of emissions sources using the visible light mode, the high sensitivity IR mode (HSM), and the fully automatic IR mode (Auto).
– ADEC Inspector Howard operated a photo ionization detector (PID) to measure volatile organic compound (VOC) concentrations (excluding methane, ethane, and propane) in air. The PID was manufactured by Rae Systems, Model ppbRae3000, serial number 594-901619 (EPA Tag ID: B12349).
– I took digital photos with a Panasonic Lumix, DMC-TS30 camera, serial number WL8GD003184.

The FLIR and PID were calibrated prior to the field inspection and the calibration records are stored at a centralized location in OECA's Office of Civil Enforcement (OCE), Air Enforcement Division (AED) offices located in Washington, D.C.

A. Pad 1-Quebec (1-Q)

Weather: temperatures in the mid-to-upper 40's, mostly sunny. Wind 11 mph.

We arrived at this site at 10:30 am. Pad 1-Q Operator "Doug" met us on site and said that they had workers on site today working on a pump for seawater. He said Pad 1-Q was pressurized.

The PID showed a VOC concentration of 0.00 ppm in the general pad area, away from the wells and manifold building. PID readings inside the Manifold Building were similarly at 0.00 unless noted below. Facility representative Kelly Tautfest used a handheld instrument to measure for lower explosive limit (LEL) at each location we observed.

Safety Note: During the inspection of Pad 1-Q, the facility's LEL instrument measured a reading of 28% of the LEL in the Manifold Building (see below). This caused the alarm to sound on their instrument.

We entered the Manifold Building. Existing leaks on a delay of repair schedule were found to still be leaking and were checked to confirm they were tagged as leaks. When new leaks were found by EPA and State inspectors, they were pointed out to facility representatives. (See Attachment 9, Video Image Log).

Facility representative Catie Coursen said that existing leaks are scheduled for repair at the next planned shutdown in August 2020. She said the date could change with planning.

Leak Description No. 1 Pad 1-Q Manifold Bldg.	Existing VOC leak on valve component.
Video file	MOV_0561
PID reading	Not taken.
Tag	Tag #1166, dated 1-27-19
Photo file	P1000114, P1000115

Leak Description No. 2 Pad 1-Q Manifold Bldg.	Existing VOC leak on pipe connection.
Video file	MOV_0562
PID reading	Not taken.
Tag	Tag #1165, dated 1-27-19
Photo file	P1000113

Leak Description No. 3 Pad 1-Q Manifold Bldg.	New VOC Leak on pneumatic control valve.
Video file	MOV_0563
PID reading	5.17 ppm
LEL	4.2 - 28.1 % (as noted by facility representative, which caused the instrument alarm to go off).
Tag	Tag #1106 was attached at the time of the inspection.
Photo file	P1000116, P1000117

We stepped outside of the Manifold Building and facility representative Laura Perry pointed out the pipes, running between the Manifold Building and wells on Pad 1-Q. She said the pipelines are welded at connections, and therefore are not a source of fugitive emissions. She said they're not a source until you reach the back of a well house.

Well House 1Q-26

At Well House 1Q26 we checked for leaks. The well was operating, as confirmed by Ms. Tautfest, who said it sends fluids to the Manifold Building. A pressure meter showed a reading of 200 psi and a temperature meter showed a temperature of 125 °F. The PID was showing a VOC concentration of 0.00 ppm from outside and inside the well house. The OGI camera did not show a leak at this location. There were no odors indicating a leak at this location.

Well House 1Q-05

At Well House 1Q-05 we checked for leaks. The PID was showing a VOC concentration of 0.00 ppm from outside and inside the well house. The OGI camera did not show a leak at this location. There were no odors indicating a leak at this location.

We left Pad 1-Q at about 11:45 am and drove back to CPF#1 for a lunch break.

We resumed the inspection at about 1:00 p.m. We had to wait for Cariboo to walk off the parking lot before driving away.

B. Pad 1-Echo (1-E)

We arrived at Pad 1-E at 1:12 pm. We were escorted by facility representatives Perry, Dotten, Coursen, and Tautfest. Mr. Kindstrand did not join us. He left the slope but were informed his alternate might join us in the field.

The weather was overcast but had warmed slightly to 50 °F. Winds were unchanged at 11 mph. We were met by Pad Operator "Kris" who granted us access.

The PID showed a VOC concentration of 0.00 ppm in the general pad area, away from the wells and the manifold building. PID readings inside the Manifold Building were similarly at 0.00 unless noted below.

No existing leaks were on a delay of repair schedule on Pad 1-E. When new leaks were found by EPA and State inspectors, they were pointed out to facility representatives. (See Attachment 9, Video Image Log).

Manifold Building

We entered the Manifold Building at 1:30 to check for gas leaks. Ms. Tautfest continued to use a handheld instrument to check for LEL readings. Her LEL alarm went off shortly after we entered the building; she said it accidentally went off when her glove blocked airflow through the tip of the unit and re-set the unit to stop the alarm.

I saw a bucket, resting on an absorbent pad on the floor containing oily liquid. I asked ADEC Inspector Howard to get a reading on the bucket's contents with the PID. The PID showed a reading of 0.00 ppm VOC.

I saw damaged pipe insulation at floor level, near a doorway which was suspect asbestos containing material. The pipe sections totaled about two linear feet. I took photos of the damaged insulation and pointed it out to the facility representatives. (Attachment 8, Digital Photo Log.)

We discovered a leak by smell, then observed it with the OGI camera. Ms. Tautfest attempted to repair the leak by tightening bolts but was not successful. The leak was tagged by the facility representatives before we left the building.

Leak Description No. 4 Pad 1-E, Manifold Building.	New VOC Leak on valve for pressure gauge.
Video file	MOV_0564
PID reading	0.55 – 1.05 ppm
Tag	Repair attempted. Leaking continued. Tag # 1001 attached at the time of the inspection.
Photo files	P1000134, P1000135, P1000136, P1000137

We left the Manifold Building and examined several wells on Pad 1-E. The weather had changed slightly since we first arrived on the site. Wind was 8-10 mph and the sky had become sunny.

Well House 1E-18

At Well House 1E-18, we checked for leaks. The well housing had been removed for maintenance (for packing gravel around the well). The PID was showing a VOC concentration of 0.00 ppm when standing close to the well. The OGI camera did not show a leak at this

location. There were no odors indicating a leak. This well may not have been operating at the time of the inspection.

Well House 1E-33
At Well House 1E-33 we checked for leaks. The well was operating and hot to the touch. The well piping was shiny with a fresh coat of paint. Ms. Tautfest said the well had just been brought back online and was producing. The PID was showing a VOC concentration of 0.00 ppm from outside and inside the well house. The OGI camera did not show a leak at this location. There were no odors indicating a leak.

We departed the 1-E Pad at 3:05 pm and drove back to CPF#1 for a closing conference with the facility.

V. Records Review

The inspectors did not request records in advance of the inspection. During the inspection I requested and received:

- A copy of the facility's *Leak Detection and Repair (LDAR) Emissions Monitoring Plan*. Version 1.6, dated January 2019. (Attachment 6)
- A map of CPF#1 and the wells that service it. According to the facility representatives, the well pads circled in red on the map are subject to Subpart OOOOa. (Attachment 7)

I also said I would request additional records from the facility related to compliance with NSPS Subpart OOOOa once I was back at my desk.[5]

VI. Closing Conference

Our closing conference to review the inspection with the facility started at about 15:15. (See Attachment 4 for meeting sign-in sheet.)

I described our observations at Pads 1-Q and 1-E today. At Pad 1-Q, operators were working to restart a seawater pump when we arrived on site. In the Manifold Building we verified two existing leaks on a delay-of- repair schedule were still leaking. They were tagged as required by subpart OOOOa. I reminded the facility representatives that Subpart OOOOa has a deadline to make repairs at the next scheduled shutdown, or within two years if there isn't a scheduled shutdown. In this case, the leaks were identified by the facility in January 2019. The facility representatives said they scheduled a shutdown at Pad 1-Q in August 2020 and were planning on making repairs then.

I said we found one new fugitive leak inside the 1-Q Manifold Building. Tag # 1106 was put on it promptly. I said that their lower explosive limit (LEL) instrument alarmed when we were observing the leak, and the measured concentration reached 28% LEL. I said we found no leaks on the exterior of the 1-Q Manifold Building, and no leaks in the well housing we checked.

[5] Records requested by EPA Inspector John Pavitt via e-mail to CPAI on 8/2/19. Response from CPAI was mailed on 8/15/19 and received on 8/20/19. The records are under review outside the scope of this inspection report.

At Pad 1-E we checked the Manifold Building for fugitive leaks. There were no leaks on a delay-of- repair schedule there. We found one new fugitive leak. Tag # 1001 was put on it after their attempt to repair it was not successful. We found no leaks on the exterior of the 1-E Manifold Building, and no leaks in the well housing we checked.

I said I found damaged pipe insulation at the 1-E Manifold Building which I identified as suspect asbestos-containing material. I recommended that they sample it to confirm whether it is asbestos or not and to repair it appropriately.

I said the Annual Compliance Reports they have been submitting are detailed and provide helpful information. I said the facility demonstrated at two locations in the filed today that they have a leak detection and repair program capable of finding, tagging and tracking fugitive leak sources.

I asked if the facility representatives had any questions for the inspectors, and they did not. We left the facility at 18:00.

VII. Areas of Concern

At the closing conference, I said that at this time I had not identified compliance concerns. However, that could change as I review their records and complete my report.

VIII. Post-Inspection Phone Calls

On 8/28/19 I called and left a message for the facility's environmental coordinators asking for clarification on information in their most recent NSPS Subpart OOOOa Annual Compliance Report (June 2019), which I received during the on-site inspection. On 8/30/19, I had a call with Laura Perry and Cattie Coursen with CPAI to go over my questions. Following is a brief summary of my questions and their responses during the call.

Q1: I noticed that their 2019 Annual Report does not include information about fugitive emission monitoring at CPF#1 Well Site 1-A, but monitoring at 1-A was included with their prior Annual Report (June 2018). Does that mean 1-A was not monitored in 2019?
Response: Ms. Perry and Ms. Coursen said Well Site 1-A was first monitored on 2/9/18 (as stated in the 2018 Annual Report). The next monitoring of 1-A took place in 2019 but was after they submitted the June 2019 report (covering the period 4/1/18 – 3/31/19). Subpart OOOOa requires that consecutive annual monitoring surveys be conducted *at least 9 months apart.* (§60.5397a(g)(1))[6] They monitored 1-A in both calendar years 2018 and 2019, they said.

Q2: In the 2019 Annual Report, I'm seeing counts of leaking components discovered, but the outcome (what happened to them) is not always accounted for. For example, at Well Site 1-E (also described as Well Site 4 in the report) the survey found 4 leaking valves. Of these, the report states that 1 was placed on delay-of-repair and 2 were repaired and resurveyed during the initial finding. What happened to the 4th leaking valve?

[6] At well sites located on the Alaskan North Slope, surveys are required annually. Elsewhere, they are required semiannually after the initial survey.

Response: The 4th valve was repaired within the 30 days allowed by Subpart OOOOa. (§60.5397a(h)(1)). Subpart OOOOa doesn't require them to give a count of leaking components such as these that are repaired within 30 days. They report on everything required by the subpart, they said. (§60.5420a(b))

Q3: Well Flowback data for Well Site 1-J is not reported on in the 2019 Annual Report. Well Site 1-J is not identified in their annual report as being subject to NSPS Subpart OOOOa. However, under the Title V air permit, the facility has been reporting to the State VOC emission calculations from storage tanks receiving flowback from 1-J, and their calculations are as high as 10 tons per year. Wouldn't that make Well Site 1-J subject to NSPS Subpart OOOOa? (§60.5365a(e))
Response: The Flowback Fluids from Well Site 1-J are not the result of well completion operations involving fracturing or refracturing. The Flowback Fluids come from "traditional" operations which are different than fracturing or refracturing, they said.

IX. List of Attachments

1. Email correspondence to Catie Coursen / Brad Broker, ConocoPhillips Alaska Inc. (CPAI) Re: EPA/ADEC Air Compliance Inspection, CPF#1.
2. Permit AQ0267TVP01 Emission Unit Inventory.
3. Inspection Entry and Exit Meeting sign-in sheets.
4. Permit Deviation Report, dated 3/12/19, from CPAI to ADEC. Re: Flowback Supporting Information Omission.
5. Excess Emissions Report, dated 6/11/19, from CPAI to ADEC. Re: Exceeding fuel use limit for EU ID 61 (Well Servicing Heaters).
6. CPAI, NSPS OOOOa Leak Detection and Repair Emissions Monitoring Plan. Version 1.6. Jan 2019.
7. Map, CPF#1 and Well Sites which flow to CPF#1.
8. Digital Photo Log and Photos
9. OGI Video Image Log and Videos